

ATTACHMENT A
Amendments to the Specification

At the following locations, a marked up copy of the replaced paragraph is provided.

Page 34, lines 2-5. ✓

DNA SEQ ID NO:5

B1
AACATTATGATGACACAGTCGCCATCATCTCTGGCTGTGTCTGCAGGAGAAAAG
GTCACTATGAGCTGTAAGTCCAGTCAAAGTGTTTTATACAGTTCAAATCAGAAGA
ACTACTTGGCCTGGTACCAGCAGAAACCAGGGCAGTCTCCTAACTACTGATCT
ACTGGGCATCCACTAGGGAATCTGGTGTCCCTGATCGCTTCACAGGCAGTGGA
TCTGGGACAGATTTTACTCTTACCATCAACAGTGTACAAGCTGAAGACCTGGCA
GTTTATTACTGTCATCAATACCTCTCCTCGCACACGTTCTGGAGGGGGGACCAAG
CTGGAAATAAAA

Page 34, lines 9-12.

AMINO ACID SEQ ID NO:6

B2
NIMMTQSPSSLAVSAGEKVTMSCKSSQSVLYSSNQKNYLAWYQQKPGQSPKLLIY
WASTRESGVPDRFTGSGSGTDFLTINSVQAEDLAVYYCHQYLSSHTFGGGTKLEI
K

Page 34, lines 18-25.

DNA SEQ ID NO:7

B3
CAGGTGCATCTGAAGGAGTCAGGACCTGGCCTGGTGGCACCCCTCACAGAGCCT
GTCCATCACATGCACTGTCTCTGGATTCTCATTATCCAGATATAATATACTGG
GTTTCGCCAGCCTCCAGGAAAGGGTCTGGAGTGGCTGGGAATGATATGGGGTG
GTGAAACACAGACTATAATTCAGCTCTCAAATCCAGACTGAGCATCAGCAAGG
ACAACTCCAAGAGCCAAGTTTTCTTAAAATGAACAGTCTGCAAACCTGATGACAC
AGCCATGTACTACTGTGCCAGCGCCTACTATGGTAACTCCTGGTTTGCTTACTG
GGGCCAGGGGACTCTGGTCACTGTCTCTGCA

Page 34, lines 27-29.

AMINO ACID SEQ ID NO:8

B4
QVHLKESGPGLVAPSQSL SITCTVSGFSLSRYNHWRQPPGKGLEWLGMIWGGE
NTDYN SALKSRLSISKDNSKSQVFLKMNSLQTD TAMY YCASAYYGNSWFAYWGQ
GTLVTVSA

Page 35, lines 20-27.

DNA SEQ ID NO:9

B5
cont'd.
AACATTATGATGACACAGTCGCCATCATCTCTGGCTGTGTCTGCAGGAGAAAAG
GTCACTATGAGCTGTAAGTCCAGTCAAAGTGTTTTATACAGTTCAAATCAGAAGA

B5
contd.
ACTACTTGGCCTGGTACCAGCAGAAACCAGGGCAGTCTCCTAAACTGCTGATCT
ACTGGGCATCCACTAGGGAATCTGGTGTCCCTGATCGCTTCACAGGCAGTGGA
TCTGGGACAGATTTTACTCTTACCATCAGCAGTGTACAAGCTGAAGACCTGGCA
GTTTATTACTGTCATCAATACCTCTCCTCGTACACGTTCCGAGGGGGGACCAAG
CTGGAAATAAAA

Page 35, lines 28-31

B6
AMINO ACID SEQ ID NO:10

NIMMTQSPSSLAVSAGEKVTMSCKSSQSVLYSSNQKNYLAWYQQKPGQSPKLLIY
WASTRESGVPDRFTGSGSGTDFTLTISSVQAEDLAVYYCHQYLSSYTFGGGTKLEI
K

Page 35, line 37 – page 36, line 5.

B7
DNA SEQ ID NO:11

CAGGTGCAGCTGAAGGAGTCAGGACCTGGCCTGGTGGCACCCCTCACAGAGCC
TGTCCATCACATGCGCTATCTCTGGGTTCTCATTATCCAGATATAGTGTACACTG
GGTTCGCCAGCCTCCAGGAAAGGGTCTGGAGTGGCTGGGAATGATATGGGGT
GGTGGAAACACAGACTATAATTAGCTCTCAAATCCAGACTGAGCATCAGCAAG
GACAACTCCAAGAGCCAAGTTTTCTTAAAAATGAACAGTCTGCAAACTGATGAC
ACAGCCATGTATTACTGTGCCAGAAAAGGGGAATTCTACTATGGTTACGACGGG
TTTGTTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA

Page 36, lines 7-9.

B8
AMINO ACID SEQ ID NO:12

QVQLKESGPGLVAPSQSL SITCAISGFSLSRYSVHWVRQPPGKGLEWLGMIWGGG
NTDYN SALKSRLSISKDNSKSQVFLKMNSLQTD D TAMY YCARKGEFY YGYDGFVY
WGQGTLVTVSA

Page 37, lines 7-15.

B9
35-220VLD-4 (variable light sequence DNA SEQ ID NO:13)

AACATTATGATGACACAGTCGCCATCATCTCTGGCTGTGTCTGCAGGAGAAAAG
GTCACTATGAGCTGTAGGTCCAGTCAAAGTGTTTTATACAGTTCAAATCAGAAGA
ACTACTTGGCCTGGTACCAGCAGAAACCAGGGCAGTCTCCTACACTGCTGATCT
ACTGGGCATCCACTAGGGAATCTGGTGTCCCTGATCGCTTCACAGGCAGTGGA
TCTGGGACAGATTTTACTCTTACCATCAGCAGTGTACAAGCTGAAGACCTGGCA
GTTTATTACTGTCATCAATACCTCTCCTCGTACACGTTCCGAGGGGGGACCAAG
CTGGAAATAAAA

Page 37, line 17-22.

35-220VLD-4 (variable light sequence AMINO ACID SEQ ID NO:14)

B10
N I M M T Q S P S S L A V S A G E K V T M S C R S S Q S V L Y
S S N Q K N Y L A W Y Q Q K P G Q S P T L L I Y W A S T R E
S G V P D R F T G S G S G T D F T L T I S S V Q A E D L A V Y
Y C H Q Y L S S Y T F G G G T K L E I K

Page 37, lines 27-35.

35-220VHC-1 (variable heavy sequence DNA SEQ ID NO:15)

B11
CAGGTGCAGCTGAAGGAGTCAGGACCTGGCCTGGTGGCACCCCTCACAGAGCC
TGTCCATCACATGCACTGTCTCTGGGTTCTCATTATCCAGATATAGTGTACACTG
GGTTCGCCAGCCTCCAGGAAAGGGTCTGGAGTGGCTGGGAATGATATGGGGT
GGTGGAACACAGACTATAATTCAGCTCTCAAATCCAGACTGAGCATCACCAAG
GACAACTCCAAGAGCCAAGTTTCTTAAAAATGAACAGTCTGCAAACTGATGAC
ACAGCCATGTACTACTGTGCCACCGCCTACTATGGTAACTCCTGGTTTGCTTAC
TGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA

Page 37, lines 38-43.

B12 35-220VHC-1 (variable heavy sequence AMINO ACID SEQ ID NO:16)

Q V Q L K E S G P G L V A P S Q S L S I T C T V S G F S L S R
Y S V H W V R Q P P G K G L E W L G M I W G G G N T D Y N S
A L K S R L S I T K D N S K S Q V F L K M N S L Q T D D T A M
Y Y C A T A Y Y G N S W F A Y W G Q G T L V T V S A

Page 39, lines 9-14.

B13 35-006VLD-1 (variable light sequence AMINO ACID SEQ ID NO:22)

N I M M T Q S P S S L A V S A G E K V T M S C K S S Q S V L Y
S S N Q K N Y L A W Y Q Q K P G Q S P K L L I Y W A S T R E
S G V P D R F T G S G S G T D F T L T I S S V Q A E D L A V Y
C C H Q Y L S S Y T F G G G T E L E I K

Page 39, lines 19-27.

35-006VHC-1 (variable heavy sequence DNA SEQ ID NO:23)

B14
CAGGTGCAGCTGAAGGAGTCAGGACCTGGCCTGGTGGCACCCCTCACAGAGCC
TGTCCATCACATGCACTGTCTCTGGGTTCTCATTATCCAGATATAGTGTACACTG
GGTTCGCCAGCCTCCAGGAAAGGGTCTGGAGTGGCTGGGAATGATATGGGGT
GGTGGAAGCACAGACTATAATTCAGCTCTCAAATCCAGACTGAACATCAGCAAG

B14
cont'd.

GACAACTCCAAGAGCCAAGTTTTCTTAAAAATGAACAGTCTGCAAACCTGATGAC
ACAGCCATGTACTACTGTGCCAGAAGGCTCTGGTACTTCGATGTCTGGGGCGC
AGGGACCACGGTCACCGTCTCCTCA

Page 39, lines 29-34.

35-006VHC-1 (variable heavy sequence AMINO ACID SEQ ID NO:24)

B15

Q V Q L K E S G P G L V A P S Q S L S I T C T V S G F S L S R
Y S V H W V R Q P P G K G L E W L G M I W G G G S T D Y N S
A L K S R L N I S K D N S K S Q V F L K M N S L Q T D D T A M
Y Y C A R R L W Y F D V W G A G T T V T V S S

Page 41, lines 25-33.

12-9VL-Hu (humanized variable light sequence DNA SEQ ID NO:17 humanized 12-9)

B16

GACATTGTGATGACACAGTCGCCAGACTCTCTGGCTGTGTCTCTGGGAGAAAG
GGTCACTATGAACTGTAAGTCCAGTCAAAGTGTTTTATACAGTTCAAATCAGAAG
AACTACTTGGCCTGGTACCAGCAGAAACCAGGGCAGTCTCCTAAACTGCTGATC
TACTGGGCATCCACTAGGGAATCTGGTGTCCCTGATCGCTTCAGCGGCAGTGG
ATCTGGGACAGATTTTACTCTTACCATCAGCAGTGTACAAGCTGAAGACCTGGC
AGTTTATTACTGTCATCAATACCTCTCCTCGTACACGTTCCGAGGGGGGGACCAA
GCTGGAAATAAAA

Page 42, lines 3-7.

B17

12-9VL-Hu (humanized variable light sequence AMINO ACID SEQ ID NO:18, humanized 12-9)

DIVMTQSPDSLAVSLGERVTMNCKSSQSVLYSSNQKNYLAWYQQKPGQSPKLLIY
WASTRESGVPDRFSGSGSGTDFTLTISVQAEDLAVYYCHQYLSSYTFGGGTKLEI
K

Page 42, lines 13-21.

12-9VH-Hu (humanized variable heavy sequence DNA SEQ ID NO:19 humanized 12-9)

B18
cont'd.

CAGGTGCAGCTGAAGGAGTCAGGACCTGGCCTGGTGAAGCCCTCACAGACCC
TGTCCATCACATGCACCATCTCTGGGTTCTCATTATCCAGATATAGTGTACACTG
GGTTCGCCAGCCTCCAGGAAAGGGTCTGGAGTGGCTGGGAATGATATGGGGT
GGTGGAAACACAGACTATAATTGAGCTCTCAAATCCAGACTGAGCATCAGCAA
GACAACTCCAAGAACCAAGTTTTCTTAAAAATGAACAGTCTGACCGCCGCTGAC

B18
Bland

ACAGCCGTGTATTACTGTGCCAGAAAAGGGGAATTCTACTATGGTTACGACGGG
TTTGTTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTTCC

Page 42, lines 23-27.

12-9VH-Hu (humanized variable heavy sequence AMINO ACID SEQ ID NO:20
humanized 12-9)

QVQLKESGPGLVKPSQTLSTCTISGFSLSRYSVHWVRQPPGKGLEWLGMWGGG
NTDYNALSALKSRLSISKDNSKNQVFLKMNSLTAAADTAVYYCARKGEFYGYDGFVY
WGQGTLLTVSS

Page 50, line 26 – page 51, line 4.

Accordingly, in accordance with the present invention, antibodies which will bind to ClfA can be prepared using variable light or heavy chains which have the same key CDR regions as indicated in the consensus of Figure 8. In particular, these antibodies will include those which have a variable heavy chain wherein the CDR1 region includes the sequence RYSVH, and/or a CDR2 region that includes the sequence SEQ ID NO:26 MIWGGGNTDYNALSALKS, and a variable light chain that has a CDR1 region that includes the sequence SEQ ID NO:27 KSSQSVLYSSNQKNYLA, a CDR2 region that includes the sequence SEQ ID NO:28 WASTRES, and/or a CDR3 region that includes the sequence SEQ ID NO: 29 HQYLSSYT.